

AMENDMENTS TO THE SPECIFICATION

Replace the paragraph starting at Page 4, line 19 with the following replacement paragraph:

Figure 2 is a block diagram illustrating a network node 30 having a processor 110, a network interface 120 such as a host channel adapter (HCA), and a memory controller 130 configured for controlling access to system memory resources 48.

Replace the paragraph starting at Page 11, line 11 with the following replacement paragraph:

Flow control is handled by the embedded processor 80 based on reception of information from the embedded processor input queue 78: in particular, the flow control protocol according to the InfiniBand Architecture Specification uses a credit-based flow control. The embedded processor 80 generates link flow control packets using the link flow control packet construction module 82, based on messages stored into the embedded processor input queue 78. The embedded processor 80 writes the link flow control packet to external memory 48; the embedded processor 80 then generates a WQE that includes the associated operation and a pointer specifying the location of a flow control packet into the embedded processor virtual lane FIFO 52a. The link flow control packet can then be output, specifying a number of available credits for another transmitting ~~node~~ node.

Replace the paragraph starting at Page 11, line 23 with the following replacement paragraph:

According to the disclosed embodiment, application operations ~~or~~ are suspended based on detecting a depletion of flow control credits for a prescribed virtual lane, enabling network congestion to be reduced without wasting processor resources or system memory. Hence, processor resources and system memory can be redirected to unaffected application resources, optimizing efficiency ~~and~~ in the network node.